

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A role managed collaborative learning support system for collaborative learning between a learning management server and a plurality of clients via a network, wherein:

each of said plurality of clients comprises resource operation transmission means and resource display means, said resource operation transmission means transmitting a request for operating resources of the learning management server manages together with a learner-user ID for identifying a learner-user using one of said ~~client~~plurality of clients, to said learning management server;

said learning management server comprises resource operation means for operating resources the resources of said learning management server in accordance with both the request ~~by said client~~ for operating resources and a judgment taking the learner into consideration, resource reference means for notifying said client of the contents of the resources, and operation interpretation means for interpreting the resource operation request sent to ~~said resource operation means~~ from the each of said plurality of clients;

said learning management server further comprises activity model data representative of a set of roles, ~~including a role which relates to the learner~~

~~transmitting the request, a set of behaviors which can be performed by each of the roles, and another set of roles for which any of behaviors is to be performed, links including a plurality of combinations of roles and behaviors performed between the roles,~~ a role table storing a correspondence of each learner-user ID and resource relative to each role, and an operation interpretation table to be used for interpreting converting the request as behaviors between the resources into behavior descriptive data indicating behavior for the resource performed by the client;

said resource operation means of said learning management server converts the request ~~into data representative of behaviors between resources and learner-ID's from the client into the behavior descriptive data by referring with~~ referring to the operation interpretation table, transmits the behavior descriptive data, the user ID and a resource identifier included in the request to the operation interpretation means and inquires said operation interpretation means whether an operation represented by the converted data is permitted;

said operation interpretation means of the learning management server refers to said role table to check whether there is a combination of role name, assigned to the learner-user ID corresponding thereto and resource-a resource and being coincident with the contents of in the activity model data to thereby judge whether the request is permitted, and returns judgment results according to the judgment to said resource operation means; and

if the resource operation means receives judgment results indicate indicating a permission, said resource operation means operates the resource, and said

resource display means of said client receives resource operation results from said resource operation means and displays the resource operation results.

2. (currently amended) A role managed collaborative learning support system according to claim 1, wherein a plurality of activity model data sets is provided within the learning management server, and said operation interpretation means notifies said resource operation means of a permission of a request operation if the behavior descriptive data ~~representative of behaviors between resources and learner ID's~~ is coincident with any one of the activity model data sets.

3. (currently amended) A role managed collaborative learning support system according to claim 2, wherein:

monitoring status display means is connected to the network;

said learning management server comprises an activity log for storing behavior interpretation data including the behavior descriptive data of the request for operating ~~sent to said resource operation means from the client~~ and role name assignment when there is a match with the activity model data, and said resource operation means writes the behavior interpretation data when the resource is operated; and

said learning management server comprises learning status monitoring means, said learning status monitoring means making said monitoring status display means display the contents of the activity log.

4. (original) A role managed collaborative learning support system according to claim 3, wherein said learning management server comprises monitoring condition data, said learning status monitoring means evaluates a condition in the monitoring condition data when the activity log changes, and if the evaluated condition is satisfied, notifies this fact to said monitoring status display means, and said monitoring status display means displays an activity status.

5. (currently amended) A role managed collaborative learning support system according to claim 2, wherein:

said learning management server comprises a resource management procedure table in place of the operation interpretation table; and

said resource management procedure table has a plurality of resource operation specification data sets each including an operation pattern, an interpretation method and an operation method, and said resource operation means searches the resource operation specification data having the operation pattern matching the ~~received-request~~ for operating from said ~~resource management procedure table~~ client, executes the corresponding interpretation method to form behavior interpretation data, inquires said operation interpretation means whether an operation corresponding to the behavior interpretation data is permitted, and if permitted, operates the resource by using the operation method written in the resource operation specification data.

6. (currently amended) A resource access privilege management server for collaborative learning between a learning management server and a plurality of clients via a network, said server comprising:

~~a table for storing a correspondence between each learner name and a role and an operation table for storing a correspondence between an operation request and a behavior name; and~~

~~means for determining an access privilege to resources of the learning management server in response to a client request, by referring to said tables and in accordance with an activity model made of a set of role names and a set of links representative of behaviors between role names~~
an activity model data representative of a set of links including a plurality of combinations of roles and behaviors performed between the roles;

a table storing an information on correspondence among user ID assigned to each user using the clients, role name, and resource identifiers respectively assigned to each of resources managed by the server;

an operation table storing an information on relationship between the request for operating resources sent to the server and names of the behaviors performed by the user for the resources;

first converting means for converting the request from the client into the names of the behaviors;

second converting means for converting the user ID sent from the clients into the role names, and further converting the resource identifiers into the role names;
and

resource access privilege determining means for determining a privilege for accessing the resources according to the request for operating if the activity model data includes a combination of the behavior name corresponding to the request for operating sent from the client, the role name corresponding to the user ID sent from the client and the resources identifier included in the request for operating.

7. (currently amended) ~~An access-~~A resource access privilege management method ~~to be performed by a learning management server of a collaborative learning support system for collaborative learning between the~~a learning management server and a plurality of clients via a network, ~~said the~~ method comprising steps of:

~~preparing a table for storing a correspondence between each learner name and a role and an operation table storing a correspondence between an operation request and a behavior name; and~~

~~determining an access privilege to resources of the learning management server in response to a client request, by referring to the tables and in accordance with an activity model made of a set of role names and a set of links representative of behaviors between role names~~preparing 1) an activity model data representative of a set of links including a plurality of combinations of roles and behaviors performed between the roles, 2) a table storing an information on correspondence

among user ID assigned to each user using the clients, role name, resource identifiers respectively assigned to each of resources managed by the server and 3) an operation table storing an information on relationship between the request for operating resources sent to the server and names of the behaviors performed by the user for the resources;

converting the request from the client into the names of the behaviors;

further converting the user ID sent from the clients into the role names, and further converting the resource identifiers into the role names; and

determining a privilege for accessing the resources according to the request for operating if the activity model data includes a combination of the behavior name corresponding to the request for operating sent from the client, the role name corresponding to the user ID sent from the client and the resource identifier included in the request for operating.

8. (currently amended) ~~A computer readable medium with instructions stored therein, the instructions when executed causing a processing device to perform:~~

~~preparing a table for storing a correspondence between each learner name and a role and an operation table storing a correspondence between an operation request and a behavior name; and~~

~~determining an access privilege to resources of the learning management server in response to a client request, by referring to the tables and in accordance with an activity model made of a set of role names and a set of links representative~~

~~of behaviors between role names~~A computer executable program to be embodied on a resource access privilege management server for collaborative learning between a learning management server and a plurality of clients via a network, the program comprising the steps of:

preparing 1) an activity model data representative of a set of links including a plurality of combinations of roles and behaviors performed between the roles, 2) a table storing an information on correspondence among user ID assigned to each user using the clients, role name, and resource identifiers respectively assigned to each of resources managed by the server and 3) an operation table storing an information on relationship between the request for operating resources sent to the server and names of the behaviors performed by the user for the resources;

converting the request from the client into the names of the behaviors;

further converting the user ID sent from the clients into the role names, and further converting the resource identifiers into the role names; and

determining a privilege for accessing the resources according to the request for operating if the activity model data includes a combination of the behavior name corresponding to the request for operating sent from the client, the role name corresponding to the user ID sent from the client and the resource identifier included in the request for operating.

9. (new) The role managed collaborative learning support system according to claim 3, wherein the learning status monitoring means counts a number of the

behavior interpretation data, and the monitoring status display means displays the link in the activity model data in a bolded state as the number counted by the learning status monitoring means increases.